RAISECOM

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QoS Function Commands-1

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Chapter 1   QoS Function Commands

1.1 mls qos

[Function]

Enable or disable QOS function.

[Command Format]

[no] mls qos

[Default]

QOS function is disabled.

[Command Modes]

Global configuration mode; Privileged user.

[Executing Command Instruction]

Use this command to enable the QOS function globally. If some QOS settings have been enabled, then QOS can work immediately. It is suggested to disable flow control when startup QOS.

[Explanation of command execution echo]

Enable global QoS successfully.

Enable global QoS unsuccessfully.

[Example]

Raisecom(config)#**mls qos**

Raisecom(config)#**no mls qos**

[Related commands]

Commands	Description
show mls qos	Show QOS configuration information.

1.2 mls qos default-cos

[Function]

Configure default COS and OVERRIDE of the port.

Note: The devices listed below is not in support of override:

ISCOM2826/2826E/2828F/2852/3026/2109F/2126E/2009/2109/2118/2812GF/2026/2016/2017/2008/ RC581-FE/581-GE/551-FE/551-GE/551-4FE.

[Command format]

mls qos default-cos {*default-cos* | **override**}

no mls qos default-cos [override]

[Parameter]

default-cos: specify default CoS value, if the port trust CoS value of ingress packets and packets are untag, use default CoS as the ingress packets' CoS value. The CoS value is from 0 to 7, default value is 0.

override: the default-cos value of port will be effective no matter trust what conditions. Default-cos override function is disabled. For example, no matter the port trusts COS, DSCP or IP Precedence, all ingress port will use this default-cos; if the ingress packets are tagged, the default-cos will replace the original value.

[Default]

Default CoS value is 0, override is disabled.

[Command mode]

Physical port/range configuration mode; privileged user.

[Executing Command Instruction]

Set the default CoS value for the port and override function.

[Explanation of command execution echo]

Set the default cos value for the port successfully.

Set the default cos value for the port unsuccessfully.

Set cos override for the port successfully.

Set cos override for the port unsuccessfully.

[Example]

Raisecom(config)#**interface port** *1*

Raisecom(config-port)#**mls qos default-cos** *3*

Raisecom(config-port)#**no mls qos default-cos**

Raisecom(config-port)#**mls qos default-cos override**

Raisecom(config-port)#**no mls qos default-cos override**

[Related commands]

Commands	Description
show mls qos port *portid*	Show QOS config information.

1.3 mls qos map cos-dscp

[Function]

Configure mapping table from CoS to dscp.

Note: cos-dscp table of ISCOM2126S is not effective until trust COS message, if not trust COS, the setting of table is not valid.

[Command format]

mls qos map cos-dscp *dscp1 dscp2 dscp3 dscp4 dscp5 dscp6 dscp7 dscp8*

no mls qos map cos-dscp

[Parameter]

dscpn: dscp value of CoSn mapping, range from 0 to 63.

[Default]

CoS value	0	1	2	3	4	5	6	7
DSCP value	0	8	16	24	32	40	48	56

[Command Modes]

Global configuration mode; privileged user

[Executing Command Instruction]

Configure the mapping from cos to dscp.

[Explanation of command execution echo]

Set the cos to dscp map successfully.

Set the cos to dscp map unsuccessfully.

[Example]

Raisecom(config)# **mls qos map cos-dscp** *10 15 20 25 30 35 40 45*

Raisecom(config)#**no mls qos map cos-dscp**

[Related commands]

Commands	Description
show mls qos maps cos-dscp	Show cos-dscp mapping information.

1.4 mls qos map dscp-cos

[Function]

Configure the mapping from dscp to switch internal priority.

[Command format]

mls qos map dscp-cos *dscp-list* **to** *cos*

no mls qos map dscp-cos

[Parameter]

dscp-list: dscp value, range from 0 to 63, the format is:2,3,5-10;

cos: switch internal priority, range from 0 to 7.

[Default]

DSCP value	0-7	8-15	16-23	24-31	32-39	40-47	48-55	56-63
Internal CoS	0	1	2	3	4	5	6	7

[Command Modes]

Global configuration mode; privileged user.

[Executing Command Instruction]

Configure the mapping from dscp to switch internal priority.

[Explanation of command execution echo]

Set the cos to dscp map successfully.

Set the cos to dscp map unsuccessfully.

[Example]

Raisecom(config)# **mls qos map dscp-cos** *0,8,16,24,32,40,48,50* **to** *0*

Raisecom(config)#**no mls qos map dscp-cos**

[Related commands]

Commands	Description
show mls qos maps dscp-cos	Show dscp-cos mapping information.

1.5 mls qos map dscp-mutation

[Function]

Configure DSCP MUTATION mapping table. This command is applicable for ISCOM2800/2900/3000 series devices.

[Command format]

mls qos map dscp-mutation *dscp-name dcp-list* **to** *dscp*

no mls qos map dscp-mutation *dscp-name*

[Parameter]

dscp-name: specify the name of dscp-mutation, the maximum length is 16 characters.

dscp-list: dscp list value, use ',' or '–' to separate, Example 2,3,5-12. The maximum value is 63.

dscp: dscp value, range from 0 to 63.

[Default]

The name of the default dscp mutation is default-dscp, mapping relationship is 0->0, 1->1, …, 63->63.

[Command Modes]

Global configuration mode; privileged user.

[Executing Command Instruction]

Create or delete dscp-mutation mapping. The default mapping can not be modified or erased.

[Explanation of command execution echo]

Set the dscp mutation successfully.

Set the dscp mutation unsuccessfully.

The input parameter is wrong.

The input name is too long.

[Example]

Raisecom(config)# **mls qos map dscp-mutation** *aaa 1-10* **to** *5*

Raisecom(config)# **no mls qos map dscp-mutation** *aaa*

[Related commands]

Commands	Description
show mls qos maps dscp-mutation	Show dscp-mutation information.

1.6 show mls qos

[Function]

Show QoS configuration information.

[Command format]

show mls qos

[Command Modes]

Privileged EXEC; privileged user.

[Executing Command Instruction]

Show QoS configuration information.

[Explanation of command execution echo]

QOS is enabled:

Set the strict priority mode unsuccessfully.

Raisecom#**show mls qos**

[Example]

Raisecom# **show mls qos**

[Related commands]

Commands	Description
mls qos	Show the queue information.

1.7 show mls qos maps

[Function]

Show the mapping configuration information in the QoS.

Note: ISCOM2016/2017/2008/2026/2109F/2126E is not in support of dscp-mutation; ISCOM2009/2109/2118/RC5xx is not in support of dscp-mutation and ip-prec-dscp.

RC5xx, ISCOM2109/2126S and other marvell series devices support cos-dscp and dscp-cos mapping only.

[Command format]

show mls qos maps *[cos-dscp | dscp-cos | dscp-mutation | ip-prec-dscp]*

[Command Modes]

Privileged EXEC; privileged user.

[Executing Command Instruction]

Show QoS mapping configuration information.

[Explanation of command execution echo]

Raisecom#**show mls qos maps** *cos-dscp*

Cos-dscp map:

cos:	*0*	*1*	*2*	*3*	*4*	*5*	*6*	*7*
--								
dscp:	*0*	*8*	*16*	*24*	*32*	*40*	*48*	*56*

Raisecom#**show mls qos maps** *dscp-cos*

Dscp-cos map:

d1 : d2	*0*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
--------------------------------------										
0 :	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*1*
1 :	*1*	*1*	*1*	*1*	*1*	*1*	*2*	*2*	*2*	*2*
2 :	*2*	*2*	*2*	*2*	*3*	*3*	*3*	*3*	*3*	*3*
3 :	*3*	*3*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*
4 :	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*6*	*6*
5 :	*6*	*6*	*6*	*6*	*6*	*6*	*7*	*7*	*7*	*7*
6 :	*7*	*7*	*7*	*7*						

Raisecom#**show mls qos maps** *ip-prec-dscp*

Ip Precedence-dscp map:

ipprec: 0   1   2   3   4   5   6   7

---

dscp: 0   8   16   24   32   40   48   56

Raisecom#**show mls qos maps** *ip-prec-dscp*

Dscp-dscp mutation map:

aaa:

d1 : d2   0   1   2   3   4   5   6   7   8   9

---

0 :   0   1   2   3   4   5   6   7   8   9

1 :   10   11   12   13   14   15   16   17   18   19

2 :   5   5   5   5   5   5   5   5   5   5

3 :   5   31   32   33   34   35   36   37   38   39

4 :   40   41   42   43   44   45   46   47   48   49

5 :   50   51   52   53   54   55   56   57   58   59

6 :   60   61   62   63

[Example]

Raisecom# **show mls qos maps**

[Related commands]

Commands	Description
mls qos map *[cos-dscp	dscp-cos	ip-prec-dscp	dscp-mutation]*	Show queue information.

1.8 show mls qos port

[Function]

Show port configuration information.

[Command format]

show mls qos port [*portid***]**

[Parameter]

portid: port ID.

[Command Modes]

Privileged EXEC; privileged user.

[Executing Command Instruction]

Show port configuration information.

[Explanation of command execution echo]

Raisecom#**show mls qos port** *1*

port 1:

Attached policy-map for Ingress: aaa

trust state: not trusted

default COS: 0

COS override: disable

default DSCP: 0

DSCP override: disable

DSCP Mutation Map: default-dscp

[Example]

Raisecom# **show mls qos port** *1*

[Related commands]

Commands	Description
mls qos trust [*cos* / *dscp* / *ip-precedence*]	Set the trust state for the port.
mls qos default-cos {*default-cos* | **override**}	Set the default cos for the port.
mls qos default-dscp {*default-dscp* | **override**}	Set the default dscp for the port.
mls qos dscp-mutation *dscp-name*	Apply dscp-mutaion on the port.
service-policy *policy-name* **ingress** *portid*	Apply policy on the port.

1.9 show mls qos queueing

[Function]

Show queue configure information.

[Command format]

show mls qos [**port** *portid*] **queueing**

[Parameter]

portid: port ID.

[Command Modes]

Privileged EXEC; privileged user.

[Executing Command Instruction]

Show queue configuration information.

[Explanation of command execution echo]

Raisecom#**show mls qos queueing**

the queue schedule mode: strict priority(SP)

wrr queue weights:

queueid-weights-delay

1   -   0   -   0

2   -   0   -   0

3   -   0   -   0

4   -   0   -   0

Cos-queue map:

    cos-queueid

0   -   1

1   -   1

2   -   2

3   -   2

4   -   3

5   -   3

6   -   4

7   -   4

[Example]

Raisecom# **show mls qos port** *1* **queueing**

[Related commands]

Commands	Description
Queue wrr-weight	Configure schedule mode.
Queue preemp-wrr	Configure schedule mode.
Queue strict-priority	Configure schedule mode.
Queue bounded-delay	Configure schedule mode.
Queue cos-map	Set the mapping form internal priority to queue.